PROFESSIONAL HYDOLOGISTS SECTION MEETING
EXAMINING BOARD OF PROFESSIONAL GEOLOGISTS,
HYDOLOGISTS AND SOIL SCIENTISTS
PROFESSIONAL HYDROLOGISTS SECTION
MINUTES
MADISON, WISCONSIN
MARCH 9, 1999

PRESENT: Stephen Donohue (unconfirmed), Herbert Garn, and Roger Hall

ABSENT: Robert Karnauskas

STAFF PRESENT: Alfred Hall, Judy Mender, and Darwin Tichenor

CALL TO ORDER

The meeting was called to order at 9:15 a.m. Because there was no quorum, no action could be taken. Members present could only discuss the materials.

DISCUSSION

Alfred Hall explained the role of the Board is to determine minimum educational and experience requirements, approve applications for licensure, and discipline.

The educational requirement needs to be defined, including the specific number of required credits and the subject areas.

After reviewing the curriculum from the American Institute of Hydrology, the University of Wisconsin-Stevens Point, and the University of Wisconsin-Madison, it was recommended to require at least 25 semester credits consisting of at least 12 semester credits of courses in surface or subsurface hydrology or water resources-related courses and at least13 semester credits in related courses.

The following recommendations were made to revise Chapter GHSS 3.04, Education:

- 3.04(1) should be revised to read "In satisfaction…a bachelor degree reflecting that the applicant has completed at least 25 semester hours or 38 quarter hours…"

- 3.04(3) should read "In order to meet the requirements sufficient to constitute a major in hydrology or water resources, an applicant must have at least 12 semester hours or 18 quarter hours of courses in surface or subsurface hydrology or water resources-related courses in two of the following areas:

    a) hydrogeology/geohydrology

b) contaminant hydrogeology
c) field methods in hydrology/hydrogeology
d) unsaturated zone hydrology (soil physics)
e) groundwater chemistry
f) groundwater flow modeling
g) groundwater and well hydraulics
h) engineering hydrology
i) forest hydrology
j) fluid mechanics dynamics
k) fluvical geomorphology
l) hydromorphology
m) snow hydrology
n) subsurface hydrology
o) geochemistry
p) ground water
q) hydraulics
r) open-channel flow
s) statistical methods in limnology
t) water chemistry
u) water quality
v) watershed hydrology
w) water modeling
x) numerical methods modeling
y) water wells

- 3.04(4) should read: "In addition to the coursework required under sub. (3), other coursework that may be used to satisfy the 25 semester-hour or 38 quarter-hour requirement includes, but are not limited to the following:

a) geology
b) engineering
c) agricultural engineering
d) hydrology
e) agronomy
f) horticulture
g) meteorology
h) soil science
i) forestry
j) natural resources
k) conservation
l) aquatic ecology
m) water supply
n) waste water
o) remote sensing
p) sedimentation
q) sediment transport

The following recommendations were made to revise Chapter GHSS 3.03, Experience:

3.03(2) should read "Areas of experience in the practice of professional hydrology include:

(a) Collection and inventory of basic hydrological data including: monitor in surface water and groundwater, monitoring precipitation quantity and distribution assessing surface water and ground quality conditions/impacts, inventory water contaminant sources, inventory conditions affecting surface water and groundwater quantity, quality and timing of flow (land use, soil types, slope drainage density). Inventory channel and flood plain conditions affecting flow and habitat (inventory physical, chemical or biological characteristics of lakes/wetlands), design/install/maintain monitoring networks and equipment (stream gauges, monitoring wells, etc. Select sampling protocols for collecting/storage of water quality samples and measure surface water flow (current meter, flow control structure).

(b) Interpretation, analysis and modeling of hydrological processes including: estimate frequency of hydrologic events, estimate pollutant budgets of surface water and aquifer systems, predict surface and groundwater contaminant fate and transport, model watershed hydrology, model urban watersheds and stream flow, model surface water water quality, model soil erosion and transport, delineate regulatory flood plains, interpret chemistry data, evaluate groundwater discharge/recharge areas and rates, model groundwater glow and model groundwater quality.

(c) Planning, design and management of hydrological systems including: design water control structures, design watershed management plans, design runoff and erosion control measures, design slope stabilization measures, design detention/retention ponds, design urban storm water management plans, design for stream bank/lakeshore protection, design channels and design stream restoration, design subsurface remediation systems, design water supply wells and design wellhead protection plans..."

ADJOURNMENT

The meeting adjourned at 2:20 p.m.